

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus comprising:
 - a first interface comprising a plurality of physical communication ports to transmit data to and receive data from a plurality of network devices;
 - a first control unit communicatively coupled to the first interface to process at least a first subset of the data;
 - a second control unit communicatively coupled to the first interface and the first control unit to process at least a second subset of the data; and
 - a logical network interface to provide multiple logical communication ports, the logical network interface communicatively coupled between the first interface and the first and second control units, wherein the logical network interface is communicatively coupled to each of the physical communication ports of the first interface by at least one signal line such that if a forwarding lookup for a packet is unsuccessful the packet is transmitted to multiple communication ports either one of the first and second control units may communicate with any of the plurality of network devices if the other of the first and second control units fails, and wherein the logical network interface enables each control unit to simultaneously manage each of the physical communication ports.

2. (Canceled)

3. (Previously Presented) The apparatus of claim 1, wherein the logical network interface comprises two logical communication ports for each one of the plurality of physical communication ports.

4. (Original) The apparatus of claim 1, wherein each of the first and second control units further comprises:

a memory device to store one or more data transmission protocols; and
a processor coupled to the memory device to process network data based at least in part upon the one or more data transmission protocols.

5. (Previously Presented) The apparatus of claim 4, wherein the one or more data transmission protocols includes Open Shortest Path First (OSPF).

6. (Original) The apparatus of claim 4, further comprising:
a non-volatile memory device coupled to the first and second control units to store configuration data for use by the first and second control units.

7. (Original) The apparatus of claim 6, wherein the apparatus comprises a chassis, and the non-volatile memory device is embodied within a first blade secured within the chassis and at least one of the first and second control units is embodied within a second blade secured within the chassis.

8. (Previously Presented) The apparatus of claim 1, wherein the first interface and the logical network interface are embodied within an Application Specific Integrated Circuit (ASIC).

9. (Original) The apparatus of claim 1, wherein the first control unit is associated with a first network address and the second control unit is associated with a second network address.

10. (Original) The apparatus of claim 1, wherein the first and second control units each independently maintain network status information.

11. (Original) The apparatus of claim 10, wherein the network status information is maintained in a routing table.

12. (Currently Amended) A method comprising:
representing a plurality of physical data communication ports as a corresponding plurality of logical data communications ports such that either one of a first control unit and a second control unit communicatively coupled to the physical data communication ports can communicate with any of a plurality of external devices communicatively coupled to the physical data communication ports if the other of the first and second control units fails, wherein the logical communications ports are provided by a logical network interface that enables each control unit to simultaneously manage each of the physical data communications ports;

performing a lookup operation for a destination port corresponding to a received packet; and

forwarding the packet to each of the physical data communication ports if the lookup operation is unsuccessful.

13. (Original) The method of claim 12, further comprising:
 - maintaining by the first control unit, first address data corresponding to the plurality of external devices; and
 - maintaining by the second control unit, second address data corresponding to the plurality of external devices.

14. (Original) The method of claim 13, wherein the first control unit maintains the first address data and the second control unit maintains the second address data each according to at least one of a plurality of routing protocols.

15. (Previously Presented) The method of claim 14, wherein the plurality of routing protocols include at least one of Open Shortest Path First protocol, Border Gateway Protocol, and Exterior Gateway Protocol.

16. (Original) The method of claim 12, wherein the first control unit may be identified by a first network address and the second control unit may be identified by a second network address.

17. (Original) The method of claim 16, wherein the second network address is derived from the first network address.

18. (Currently Amended) A storage medium having stored thereon a plurality of executable instructions, wherein when executed, operate to represent a plurality of physical data communication ports as a corresponding plurality of logical data communications ports such that either one of a first control unit and a second control unit can communicate with any of a plurality of external devices communicatively coupled to both the first and second control units if the other of the first and second control units fails, wherein the logical data communications ports are provided by a logical network interface that enables each control unit to simultaneously manage each of the physical data communications ports, to perform a lookup operation for a destination port corresponding to a received packet, and to forward the packet to each of the physical data communication ports if the lookup operation is unsuccessful.

19. (Original) The storage medium of claim 18, further comprising instructions, wherein when executed, operate to:

maintain in association with the first control unit, first address data corresponding to the plurality of external devices; and

maintain in association with the second control unit, second address data corresponding to the plurality of external devices.

20. (Original) The storage medium of claim 19, further comprising instructions, wherein when executed, operate to perform layer 2 and/or layer 3 switching.